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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-85. (Cancelled)

- 86. (Currently Amended) A continuous carbon fiber comprising single-wall carbon nanotubes in substantially parallel orientation, wherein a substantial portion of the single-wall carbon nanotubes have a homogeneous characteristic selected from the group consisting of lengths, diameters, helicities and combinations thereof and having a composite structure comprising:
 - a) a first plurality of single-wall carbon nanotubes in a first region having a first homogeneous characteristic, wherein the first homogeneous characteristic is selected from the group consisting of lengths, diameters, helicities and combinations thereof;
 - b) a second plurality of single-wall carbon nanotubes in a second region having a second homogeneous characteristic, wherein the second homogeneous characteristic is selected from the group consisting of lengths, diameters, helicities and combinations thereof; and
 - c) wherein
 - (i) the first plurality of single-wall carbon nanotubes is different from the second plurality of single-wall carbon nanotubes and
 - (ii) the first homogeneous characteristic is different from the second homogeneous characteristic.
- 87. (Currently amended) A composite fiber comprising a <u>first</u> plurality of continuous carbon fibers and a second plurality of carbon continuous fibers, wherein:

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(a) each of the <u>first plurality of continuous carbon fibers emprises</u> single-wall carbon nanotubes in substantially parallel orientation <u>and is similar to the</u> other continuous carbon fibers in the first plurality of <u>continuous carbon fibers</u>;

- (b) each of the second plurality of continuous carbon fibers comprises single-wall carbon nanotubes in substantially parallel orientation and is similar to the other continuous carbon fibers in the second plurality of continuous carbon fibers; and
- (c) the continuous carbon fibers of the first plurality of continuous carbon fibers are different from the continuous carbon fibers of the second plurality of carbon fibers.
- 88. (Previously Presented) The composite fiber of claim 87 wherein the composite fiber is a cable-like structure.
- 89. (Previously Presented) A composite fiber comprising a plurality of continuous carbon fibers, wherein each of the continuous carbon fibers comprise single-wall carbon nanotubes in substantially parallel orientation, wherein the composite fiber further comprises:
 - a) a central core comprising metallic single-wall carbon nanotubes; and
 - b) non-metallic single-wall carbon nanotubes, wherein the non-metallic single-wall carbon nanotubes surround the central core.
- 90. (Previously Presented) The composite fiber of claim 87 wherein at least some of the single-wall carbon nanotubes in at least a portion of the composite fiber are not parallel.
- 91-93. (Cancelled)
- 94 (New) The fiber of claim 86 wherein the first region and the second region are in different segments along the axis of the fiber.
- 95. (New) The fiber of claim 86 wherein the first region and the second region are simultaneously present in a cross-section of the fiber.